

REMARKS

Overview

Claims 1, 2, 4, 5, 8, 10, 13-25, 45, 46, and 48-54 are pending in the present application. The sole issue is obviousness of those claims. Claims 1 and 45 have been amended. This amendment accompanies a Request for Continued Examination (RCE). Reconsideration is respectfully requested.

Drawing

The acceptance of the drawings is gratefully acknowledged.

35 U.S.C. § 103 Rejections

Claims 1, 2, 4, 5, 10, 13-17, 19-25, 45, 46, 49-52 and 54 stand rejected as obvious based on Alt, U. S. Patent No. 5,898,384. This rejection is respectfully traversed.

Alt discloses one way to remotely control electrical apparatuses. Its approach is to provide a control unit 16 at each separate electrical device. For example, the primary embodiment is a display sign. The electrical devices are a set of lights. (See Alt Figure 2). A dedicated control unit 16 is installed on each individual sign. The reason described in Alt for doing so is so that there can be direct, individual, remote control of each device for "efficiency" and reducing "energy consumption". See, Alt, col. 1, lines 35-36. Alt states that it relates to "electronic systems for controlling a population of similar, generally independently operated devices". Col. 1, lines 18-20.

One aspect of the present invention relates to controlling wide area lighting systems. As illustrated in Applicant's drawings, for example Figure 1, each system is installed at a site. Wide area lighting generally requires multiple arrays of high intensity lamps positioned around the area

to be illuminated. High intensity lighting fixtures for wide area lighting require relatively high voltage from a high voltage power source. Thus, such systems typically utilize ballast/lamp circuits that are configured to handle such high electrical power. Each array typically has such circuits in an enclosure box associated with it (e.g., such a box is depicted in Figure 8 on each pole for each array 16).

To advance prosecution of the present application, Applicant's independent claims 1 and 45 have been amended to set out a combination which is submitted to be patentably distinct from Alt.

Instead of placing a remote control transceiver at each array of lights, in Applicant's claim 1 a remote control transceiver is associated with an entire lighting system. This single remote controller is the remote communication point for instructions from the central, off-site controller.

A benefit of such a paradigm is illustrated in Applicant's Figure 8C. A customer (an example is a school district or park and recreation department) owns an existing lighting system at a site or purchases such a system. The customer can manually turn the lights on or off on-site. Alternatively, some type of on-site timing or control system can be set to do so. However, as recognized by Alt, and discussed in detail in Alt (see cols. 3 and 4), manual on-off daily control, or reliance on photocells or timers, raises issues in terms of efficiency, accuracy, and energy usage.

While Alt proposes a wireless remote controller for each separate device, Applicant's claim 1 proposes a different paradigm.

As indicated by the format of Applicant's revised claim 1, a central control system can operate plural lighting systems at different sites by placing one remote controller at each site or for each lighting system. As indicated at Applicant's Figure 1, a remote controller 14 is

essentially a part of the central control system. The central control system has a central controller with a schedule of events or conditions that can be supplied by the customers. The central control system includes the infrastructure for wide area long distance communication to the different sites distributed around the country (the communications link). The central control system includes a remote controller such as REC 14 that can be installed at each site for customers that subscribe. The remote controller is connected to the central controller in a fashion that it can be instructed by the central controller to control operation of an entire lighting system or individual arrays of fixtures in that system. Unlike Alt, one remote control can do so.

The paradigm of Applicant's claims 1 and 45 is therefore not disclosed nor suggested by Alt. Alt teaches away from that specific claimed combination of Applicant's invention. Alt eschews Applicant's claims 1 and 45, where one remote controller is used for each lighting system, to instead teach an individual remote controller for direct individual control of each device. Alt states at col. 4, lines 32-34, "[i]n particular, the invention provides for transmissions of coded programming signals which designate a particular lighting or operating protocol to a particular sign board or apparatus".

Imagine, for example, having to add an individual remote controller to each array of a plurality of light arrays for a lighting system. This would magnify capital hardware costs and labor. It also requires that the central control keep track of and communicate with these many more remote control units. Alt describes specific timing protocol to allow such individualized communications.

A benefit of Applicant's claims 1 and 45 is that a central control entity can add one remote controller to each lighting system instead of one remote control for each device of the lighting system. This is much more efficient and economical from the standpoint of retrofitting

existing lighting systems or incorporating new systems. It promotes more economical maintenance or repair. It is therefore respectfully submitted independent claims 1 and 45 are not obvious in light of Alt. The remaining claims are dependent on either claim 1 or claim 45 and submitted to be allowable for the reasons expressed in support of claims 1 and 45.

As described in Applicant's specification, as a practical matter, many times a lighting system has all arrays on or off. But as explained in Applicant's specification, the paradigm of Applicant's claims 1 and 45 does not preclude the single remote controller from issuing instructions turning on or off just discreet arrays of the system. Thus, the claimed invention provides some advantages of Alt but without requiring an individual remote controller at each array of the entire lighting system.

Claims 8, 19, 48, and 53 stand rejected as obvious based on Alt in view of Levy, U. S. Patent No. 6,204,615. This rejection is respectfully traversed. Levy does disclose a control system for outdoor lighting. However, it is not analogous to Applicant's claimed invention. Levy describes a control system that instructs operation of plural lights via electrical power lines 22 and 14 connected between a "control room 18", "lighting cabinets 16", and "controller modules 27" for each light pole. This "control room 18" is hard wired to lighting systems. While the control room may not need to be specifically right next to the lighting systems, it is not remote in the sense of controlling lighting systems that are dispersed widely over a large geographic area. Levy's "control room 18" is essentially dedicated to one lighting system. Additionally, Levy also requires specific programmable components at what it calls controller module 27 on each light pole. Therefore, each array of lights requires a special added component for operation. Again, compare Applicant's claims 1 and 45, which have one remote controller for an entire lighting system. Each array does not need a controller. It is submitted Levy is

nonanalogous and it does not pertain to a system for widely geographically distributed plural lighting systems, at least some of which can be to different entities and which do not require hard wiring for communication through a power line connection. Claims 8, 19, 48, and 53 are dependent from either independent claim 1 or independent claim 45 and are therefore submitted to be allowable for the reasons expressed in support of those claims.

Conclusion

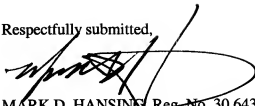
It is respectfully submitted all matters raised in the Office Action have been addressed and remedied and that the application is in form for allowance. Favorable action is respectfully requested.

This amendment accompanies the filing of a Request for Continued Examination (RCE). Please charge Deposit Account No. 26-0084 the amount of \$810.00 for the RCE per the attached transmittal.

This is also a Request for a Two-Month Extension of Time from November 10, 2007 to January 10, 2008 and authorization is given to charge Deposit Account No. 26-0084 the fee of \$460.00. It is not believed that any further fees or request for extension of time are required for entry of this response but if any has been inadvertently overlooked, please consider this a request therefore and charge any required fee to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark D. Hansing', with a large, sweeping loop at the end.

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